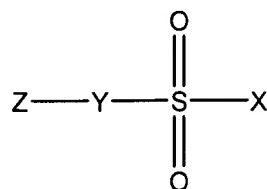


In the claims

Claims 1-70. (canceled)

71. (currently amended) A coating for contacting a plant surface comprising an effective amount of ~~an anti-fouling~~ a compound represented by general structure 2:



2

wherein

X represents -OH, F, Cl, or Br;

Y represents O, ~~S, or Se~~;

Z represents optionally substituted alkylphenyl, or  $-(\text{CH}_2)_m\text{-R}_{80}$ , wherein when Z is substituted, a substituent is selected independently for each occurrence from the group consisting of ~~halo, azido, alkyl, and aralkyl, alkynyl, cycloalkyl, alkoxy, nitro, imino, amido, silyl, alkylthio, sulfonyl, sulfonamido, formyl, heterocyclyl, aryl, heteroaryl, and trifluoromethyl;~~

$\text{R}_{80}$  represents independently for each occurrence aryl; and

m is an integer in the range 0 to 8 inclusive; ~~or a salt thereof~~;

wherein the coating releases the compound or a biologically active fragment thereof, and wherein the coating is aqueous or the compound is microencapsulated in a liquid or a solid comprising ~~water~~, an organic polymer, lipid, fat, carbohydrate, wax, inorganic oxide, or silicone polymer.

72. (currently amended) The coating of claim 71, wherein Z represents optionally substituted alkylphenyl; or aralkylphenyl ~~arylphenyl~~.

73. (previously presented) The coating of claim 71, wherein Z represents 4-(2-methylpropyl)phenyl, 4-(1,1-dimethylethyl)phenyl, 4-(1,1-dimethylpropyl)phenyl, 4-pentylphenyl, 4-(1-methyl-1-phenylethyl)phenyl, or 4-(1-methylheptyl)phenyl.

74-103. (canceled)

104. (**currently amended**) The coating of claim 71 ~~or 75~~, wherein the coating is aqueous  
~~comprises water~~.

105. (**currently amended**) The coating of claim 71 ~~or 75~~, wherein the coating comprises an  
inorganic oxide.

106. (**currently amended**) The coating of claim 71 ~~or 75~~, wherein the coating comprises a  
silicone polymer.